Mr. Thomas A. Reilly has forty years' experience in criticality safety and process support for facilities processing and storing uranium and plutonium. He is qualified as a URS SMS Senior Criticality Safety Engineer. Mr. Reilly serves on national committees including American Nuclear Society (ANS)-8 and is an emeritus member of the Department of Energy (DOE) Criticality Safety Support Group. He was chairman of the ANSI-ANS-8.14 working group when the Standard was issued. He served as chairman of the Savannah River Site 200 Area Criticality Audit Committee and performed criticality safety assessments at various facilities including Los Alamos National Laboratory, Oak Ridge National Laboratory, Lawrence Livermore National Laboratory, Rocky Flats, and BWXT.

Mr. Reilly's areas of expertise include nuclear criticality safety of chemical separations facilities and fuel storage pools, liquid waste storage tanks, audits and assessments of criticality safety, and nuclear criticality safety standards compliance. Mr. Reilly began his nuclear career as a process engineer in the Separations Facilities at the Savannah River Site. He had responsibilities for glovebox facilities that decontaminated and processed neptunium and plutonium-238 solutions into oxides. He also had responsibility for remotely operated facilities that processed plutonium-239. He was involved in the development of a process to separate americium-241 from aged plutonium-239 in remotely operated facilities in order to make the americium-241 available for industrial uses.

As a criticality safety engineer, Mr. Reilly first had responsibility for a fuel storage pool that received and stored MTR fuel from domestic and foreign reactors. He was responsible for day-to-day support as well as providing the criticality safety evaluations for storage of the fuel. He later had responsibility for criticality safety of both glovebox and remotely operated facilities that processed and stored uranium-235 and plutonium-239. The responsibilities included day-to-day support as well as providing and reviewing criticality safety evaluations. He served as nuclear criticality safety lead and then manager for the SRS Separations and Fuel Fabrication Facilities. In this role, he mentored new criticality safety engineers as well as successfully interacting with external agencies such as DOE Operational Readiness reviews and the DNFSB concerning criticality safety issues. After retirement in 2004, Mr. Reilly under contract to URS SMS has provided criticality safety support to Separations and Waste Management facilities.

Mr. Reilly received a M.S. in Chemical Engineering from the University of Delaware and a B. S. in Chemical Engineering from Lehigh University with high honors. He is a member of the NCSD Division of the American Nuclear Society, the American Chemical Society, and the American Institute of Chemical Engineers.